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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/129,883 08/06/98 YAMAGISHI

H Q46699

EXAMINER

QM12/1115

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE NW
WASHINGTON DC 20037-3202

BLAU, S

ART UNIT

PAPER NUMBER

3711

DATE MAILED:

11/15/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/129,883

Applicant(s)

Yamagishi

Examiner

Stephen Blau

Group Art Unit

3711

☒ Responsive to communication(s) filed on Sep 5, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 3-16 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 3-16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Sep 5, 2000 is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

S/b 11/13/00

S. Passaniti
Sebastiano Passaniti
Primary Examiner

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Drawings

1. The changes to figure 4 is agreed with.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Yamagishi (5,695,413) in view of Yamagishi (5,779,563).

Yamagishi (413) discloses a core having a distortion of 3.5 mm under an applied load of 100 kg, an outer cover layer having a Shore D hardness in a range of 50-60, an inner cover layer having a Shore D hardness in a range of 28-68, an inner cover having a gage of 1.3-2.4 mm, an outer cover having a gage of 1.3-2.4mm (Fig. 2), and products of the Shore D hardness of an

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inner cover layer multiplied by the Shore D hardness of an outer cover layer in form that each layer has a Shore D hardness and the products would be in a range of 1500-4000 (Fig. 2).

Yamagishi (413) lacks dimples. Yamagishi (563) discloses a plurality of dimples, at least three types of dimples which are different in diameter, a largest diameter of 4.150 mm, a dimple depth for a largest size dimple being .210 mm, V_o being .48 for a largest size, V_o for the ball as a hole being .48, dimples of a smallest type having a diameter of 3.5 mm and a depth of .210 mm (Type II, Table 3) in order to have a ball with improved flying distance, controllability, straight travel, roll and durability (Col. 1, Lns. 50-57). In addition, Yamagishi (563) discloses a V_o in a range of .40-.65 in order to prevent a stall and a descending trajectory (Col. 5, Lns. 38-47). Yamagishi (563) does not specifically disclose a V_r but clearly as shown in enclosure to amendment dated 8 March 2000 type II dimples have a V_r of .996.

It would have been obvious to include in the ball of Yamagishi (413) to have a product of Shore D hardness of an inner and outer cover layer to be 1500-3000 in order to have a ball which minimizes damage when being impacted by a club.

In view of the patent of Yamagishi (563) it would have been obvious to modify the ball of Yamagishi (413) to have type II dimples as defined by the claims in order to utilize a dimple pattern available in the market place to improve flying distance, controllability, straight travel, and roll.

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4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi in view of Yamagishi (5,779,563).

Hayashi discloses a core having a distortion of 2.8-3.0 mm under an applied load of 100 kg (Ref. No. 4, Col. 2, Lns. 32-34), an outer cover layer having a Shore D hardness in a range of 30-70 (Ref. No. 3, Col. 3, Lns. 62-64), an inner cover layer having a Shore D hardness in a range of 33-53 (Ref. No. 5, Col. 3, Lns. 13-18), products of the Shore D hardness of an inner cover layer multiplied by the Shore D hardness of an outer cover layer in form that each layer has a Shore D hardness and the products would be in a range of 1500-3700, and dimples on a cover surface having a conventional pattern by a well known method (Col. 4, Lns. 26-30).

Hayashi lacks a specific dimple pattern. Yamagishi (563) discloses a plurality of dimples, at least three types of dimples which are different in diameter (Type II, Table 3) in order to have a ball with improved flying distance, controllability, straight travel, roll and durability (Col. 1, Lns. 50-57). Yamagishi (563) does not specifically disclose a V_r but clearly as shown in enclosure to amendment dated 8 March 2000 type II dimples have a V_r of .996.

It would have been obvious to include in the ball of Hayashi a product of Shore D hardness of an inner and outer cover layer to be 2000-3000 in order to have a ball which minimizes damage when being impacted by a club.

In view of the patent of Yamagishi (563) it would have been obvious to modify the ball of Hayashi to have type II dimples as defined by the claims in order to utilize a dimple pattern available in the market place to improve flying distance, controllability, straight travel, and roll.

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Response to Amendment

5. The argument that it is improper to use the reference of Yamagishi (413) since Yamagishi (413) does not disclose any dimples, Vr and Vo is disagreed with. Dimples on the surface of a cover is the most common surface design and it would be obvious for one skilled in the art to place a known dimple pattern on the ball of Yamagishi (413) in order to make a ball fly better after being impacted by a club. The argument that it is improper to use the reference of Yamagishi (413) since Yamagishi (413) does not disclose the product of a Shore D hardness of an outer layer of the core and a cover layer is disagreed with. Yamagishi (413) disclosed a range of hardness for both layers and any combination would have been an suitable otherwise Yamagishi (413) would have stated as such. The argument that it is improper to combine the teachings of Yamagishi (563) with Yamagishi (413) since Yamagishi (563) does not disclosed the claimed distortion values as claimed is disagreed with. Yamagishi (563) was not used to show distortion values of a core but to show a known dimple pattern used on golf balls.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (703) 308-2712. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Jeanette Chapman whose telephone number is (703) 308-1310. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0858.

slb/ 13 November 2000



Sebastiano Passaniti
Primary Examiner